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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,631	09/08/2003	Naoyuki Sato	SONY-26700	3451
7590 09/05/2007 Jonathan O. Owens HAVERSTOCK & OWENS LLP 162 North Wolfe Road Sunnyvale, CA 94086			EXAMINER HOANG, HIEU T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 09/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

mn

Office Action Summary	Application No. 10/658,631	Applicant(s) SATO, NAOYUKI	
	Examiner Hieu T. Hoang	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 08/06/2007.
2. Claims 1-25 are pending and presented for examination.

Response to Arguments

3. Applicant's arguments filed have been fully considered but they are not persuasive.
4. The first argument is on pages 7-8 of the Remarks wherein the applicant argues that the prior art does not teach: "one or more synchronization protocol stacks"; and "the messages between the one or more synchronization protocol applications and the interface are independent of a protocol used between the interface layer and the synchronization protocol stack". The examiner respectfully traverses the argument. The prior art does disclose "one or more synchronization protocol stacks" as a plurality of synchronization protocol such as HTTP, SyncML, WebDAV, SOAP and ebXML (Ong, [0143]); whereas the application also uses SyncML, WebDAV as synchronization protocols (application, fig. 4). These synchronization application protocols inherently exist in a protocol stack of the network device that supports the protocols.
5. Furthermore, the prior art does disclose "the messages between the one or more synchronization protocol applications and the interface are independent of a protocol used between the interface layer and the synchronization protocol stack" ([0139], a generic application program interface (API) that can include modules that convert, difference and merge documents to supports synchronization tasks. The applicant

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argues that the prior art teaches away from the invention because the prior art uses plugged in modules that requires developing efforts (page 7, last paragraph). Although these modules are plugged in, one skilled in the art can appreciate that the plug-in features is used for updating the API with further synchronization document supports in the future; e.g., new document application format in the future ([0140] lines 4-10). When dealing with conventional applications (such as the case in the application, page 8 line 29-page 9 line 2), there is no need for plug-ins for "custom synchronization tasks" from "third party vendors". So conventional modules can be provided to the API as a default package for converting/merging documents between conventional application formats. Document format converting between the application layer and the API is independent from the synchronization protocol, which can be any one of already available synchronization protocols: HTTP, SyncML, WebDAV, SOAP and ebXML ([0143]).

6. The examiner respectfully traverses the arguments on U.S.C. 103 rejections on pages 9-11 for the same rationale given above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 15-18 and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ong et al. (US 2003/0182450, hereafter Ong).

9. For claim 15, Ong discloses a method of providing an interface to one or more synchronization applications resident within a first device coupled to a network of devices (abstract), the method comprising:

- sending and receiving messages to and from the one or more synchronization applications through an interface layer to one or more synchronization protocol stacks, to synchronize data between the first device and at least one other device within the network of devices ([0139], API interface between applications and plug-in modules for synchronization tasks, [0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes with a server (or some other devices) using an email protocol), wherein the messages between the one or more synchronization applications and the interface layer are independent of a protocol used between the interface layer and the synchronization protocol stacks (Ong, [0139], communications between the application layer and the API does use not a protocol and is independent of available synchronizing protocols such as SyncML and WebDAV); and
- generating and receiving communications at the interface layer to complete data synchronization between the first device and the at least one other device within the network of device (Ong, [0139], API for document conversion, differencing,

and merging of documents created or edited on more sophisticated devices for synchronizing documents of applications between devices, [0143], supporting a variety of synchronization protocols such as SyncML, WebDAV).

10. For claim 21, Ong discloses an apparatus for providing an interface to one or more synchronization applications resident within a first device coupled to a network of devices (abstract), the apparatus comprising:

- means for sending and receiving messages to and from the one or more synchronization applications through an interface layer to one or more synchronization protocol stacks, to synchronize data between the first device and at least one other device within the network of devices ([0139], API interface between applications and plug-in modules for synchronization tasks, [0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes with a server (or some other devices) using an email protocol), wherein the messages between the one or more synchronization applications and the interface layer are independent of a protocol used between the interface layer and the synchronization protocol stacks (Ong, [0139], an application programming interface API is not a protocol and is independent of synchronizing protocols such as SyncML and WebDAV); and
- means for generating and receiving communications at the interface layer to complete data synchronization between the first device and the at least one other device within the network of device (Ong, [0139], API for document conversion,

differencing, and merging of documents created or edited on more sophisticated devices for synchronizing documents of applications between devices, [0143], supporting a variety of synchronization protocols such as SyncML, WebDAV).

11. For claims 16 and 22, Ong further discloses the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload ([0005] lines 9-18, PIM, [0037], [0038], downloading and uploading synchronizations are possible).

12. For claims 17 and 23, Ong further discloses the interface layer is an application programming interface (API) (Ong, [0139]).

13. For claims 18 and 24, Ong further discloses the interface layer is protocol independent (Ong, [0139], an application programming interface API is not a protocol).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-5, 6-13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong in view of Ericsson et al. (SyncML Sync Protocol, version 1.0.1, http://www.openmobilealliance.org/tech/affiliates/syncml/syncml_protocol_v101_20010615.pdf, hereafter Ericsson)

16. For claim 1, Ong discloses a first device to synchronize data with a second device (fig. 1B, server and small device synchronizing), the first device (server) comprising:

- one or more applications (fig. 2, server 102 contains office applications, [0028]-[0030], sound, video, and word processing applications);
- a network layer coupled to interface with the second device ([0031] lines 12-16, network layer between the server and the small device, [0038] lines 19-21, HTTP or XML network layer);
- synchronization protocols to provide a synchronization protocol between the first device and the second device ([0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes with a server (or some other devices) using an email protocol); and
- an interface layer coupled to communicate with the one or more applications and the synchronization layer to provide generic synchronization communications between the one or more applications and the synchronization layer ([0139], an application programming interface API to communicate with the documents (or

applications) and the synchronization plug-in modules (synchronization layer, [0143] lines 1-5, SyncML and WebDAV synchronization protocols); wherein the messages between the one or more synchronization applications and the interface layer are independent of a protocol used between the interface layer and the synchronization protocol stacks (Ong, [0139], communications between the application layer and the API does use not a protocol and is independent of available synchronizing protocols such as SyncML and WebDAV);

Ong does not explicitly disclose a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s).

However, Ericsson discloses a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s) (section 1.1, fig. 1, SyncML I/F is the interface layer, SyncML adapter is the synchronization layer, coupled to HTTP/WSP/OBEX or the network layer).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

17. For claim 8, Ong discloses a network comprising one or more network devices (fig. 2, a server, a workstation, a small device); and an application device comprising:

- one or more applications (fig. 2, server 102 contains office applications, [0028]-[0030], sound, video, and word processing applications);

- a network layer coupled to interface with the one or more network devices ([0031] lines 12-16, network layer between the server and the small device, [0038] lines 19-21, HTTP or XML network layer);
- synchronization protocols to provide a synchronization protocol between the application device and the one or more network devices ([0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes with a server (or some other devices) using an email protocol); and
- an interface layer coupled to communicate with the one or more applications and the synchronization layer to provide generic synchronization communications between the one or more applications and the synchronization layer ([0139], an application programming interface API to communicate with the documents (or applications) and the synchronization plug-in modules (synchronization layer, [0143] lines 1-5, SyncML and WebDAV synchronization protocols); wherein the messages between the one or more synchronization applications and the interface layer are independent of a protocol used between the interface layer and the synchronization protocol stacks (Ong, [0139], communications between the application layer and the API does use not a protocol and is independent of available synchronizing protocols such as SyncML and WebDAV);

Ong does not explicitly disclose a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s).

However, Ericsson discloses a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s) (section 1.1,

fig. 1, SyncML I/F is the interface layer, SyncML adapter is the synchronization layer, coupled to HTTP/WSP/OBEX or the network layer).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

18. For claims 2 and 9, Ong-Ericsson substantially discloses the invention as in claims 1 and 8, Ong-Ericsson further discloses at least one of the one or more applications comprises a synchronization application (Ong, [0046] lines 7-10).

19. For claims 3 and 10, Ong-Ericsson substantially discloses the invention as in claims 2 and 9. Ong-Ericsson further discloses the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload (Ong, [0005] lines 9-18, PIM, [0037], [0038], downloading and uploading synchronizations are possible).

20. For claims 4 and 11, Ong-Ericsson substantially discloses the invention as in claims 1, 8. Ong-Ericsson further discloses the interface layer is an application programming interface (API) (Ong, [0139]).

21. For claims 5, 12, Ong-Ericsson substantially discloses the invention as in claims 1, 8. Ong-Ericsson further discloses the interface layer is protocol independent (Ong, [0139], an application programming interface API is not a protocol).

22. For claims 6 and 13, Ong-Ericsson substantially discloses the invention as in claims 1 and 8. Ong-Ericsson further discloses synchronization layer comprises a synchronization protocol stack (same rationale as in claim 1, synchronization layer contains a synchronization protocol stack such as SyncML and WebDAV, etc.).

23. For claim 20, Ong substantially discloses the invention as in claim 15. Ong further discloses the synchronization protocol stacks ([0143]). Ong does not explicitly disclose the communications generated at the interface layer are sent to a network layer via one synchronization protocol within the first device, and communications received at the interface layer are received from one synchronization protocol stacks via the network layer.

However, Ericsson discloses the communications generated at the interface layer are sent to a network layer via one synchronization protocol within the first device, and communications received at the interface layer are received from one synchronization protocol stacks via the network layer (Ericsson, fig. 1, at the sending side, data goes from the interface layer (SyncML I/F) to synchronization layer (SyncML adapter) to the network layer, and vice versa at the receiving side).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

24. Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong, as applied to claims 15, and 21, in view of Stevenson et al. (US 2003/0014483, hereafter Stevenson)

25. For claims 19 and 25, Ong-Ericsson substantially discloses the invention as in claims 15, 21. Ong-Ericsson further discloses the synchronization protocol stack is selected from a group consisting of SyncML and Web Distributed Authoring and Versioning (WebDAV) (Ong, [0143]).

Ong-Ericsson discloses other protocols for synchronization such as SOAP and epXML (Ong, [0143]). Ong-Ericsson does not disclose Information Content Exchange (ICE).

However, Stevenson discloses Information Content Exchange (ICE, [0107])

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Stevenson to implement a synchronization protocol stack consisting of SyncML, WebDAV, and ICE to provide more flexibility and functionality to the system.

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26. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong-Ericsson, as applied to claims 5, 13, in view of Stevenson.

27. For claims 7 and 14, Ong-Ericsson substantially discloses the invention as in claims 5, 13. Ong-Ericsson further discloses the synchronization protocol stack is selected from a group consisting of SyncML and Web Distributed Authoring and Versioning (WebDAV) (Ong, [0143]).

Ong-Ericsson discloses other protocols for synchronization such as SOAP and epXML (Ong, [0143]). Ong-Ericsson does not disclose Information Content Exchange (ICE).

However, Stevenson discloses Information Content Exchange (ICE, [0107])

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Stevenson to implement a synchronization protocol stack consisting of SyncML, WebDAV, and ICE to provide more flexibility and functionality to the system.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Hansmann et al. US 2005/0228812. Accessing different types of back ended data stores.
- Leung. US 6,487,605. Mobile IP mobility agent.
- Naidoo et al. US 6,594,228. Backup for signaling links.
- Flanagan et al. US 7,149,813. Synchronizing mobile devices.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-

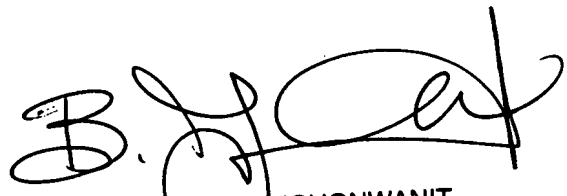
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1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HH/
HH


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER
8/30/7